In The Claims:

Claim 1. (currently amended) A biopolymer marker [having a sequence identified as SEQ ID NO:1 useful in indicating at least one particular disease state] peptide consisting of amino acid residues 2-17 of SEQ ID NO:1 diagnostic for Type II diabetes.

Claims 2-35 (currently canceled)

Claim 36. (new) A method for diagnosing Type II diabetes comprising:

(a) obtaining a sample from a patient;

(b) conducting mass spectrometric analysis on said sample in a manner effective to maximize elucidation of discernible peptide fragments contained therein; and

(c) comparing mass spectrum profiles of a peptide consisting of amino acid residues 2-17 of SEQ ID NO:1 to mass spectrum profiles of peptides elucidated from said sample; wherein recognition of a mass spectrum profile in the sample displaying the characteristic profile of the mass spectrum profile for the peptide consisting of amino acid residues 2-17 of SEQ ID NO:1 is diagnostic for Type II diabetes.

Claim 37. (new) The method of claim 36, wherein the sample is

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an unfractionated body fluid or a tissue sample.

Claim 38. (new) The method of claim 36, wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 39. (new) The method of claim 36, wherein said mass spectrometric analysis is Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS).

Claim 40. (new) The method of claim 36, wherein said patient is a human.

Claim 41. (new) A Type II diabetes diagnostic kit comprising: (a) a peptide consisting of amino acid residues 2-17 of SEQ ID NO:1 and (b) an antibody that binds to said peptide in a sample from a patient.

Claim 42. (new) The diagnostic assay kit of claim 41, wherein said antibody is immobilized on a solid support.

Claim 43. (new) The diagnostic kit of claim 41, wherein said antibody is labeled.